

effect in a foreign country which is different and unintended under U.S. practice (i.e., changing “consisting of” to “comprising”); (v) to remove or amend original claim language that could be regarded as alternative expressions that are acceptable under foreign patent practice but possibly subject to objection under U.S. practice, typically having a broadening or neutral effect in the amended claim; and/or (vi) to improve the clarity or meaning of the original language.

In the case of amendments effectively changing an original claim element expressed as a “means plus function” that could raise a presumption of claim expression under 35 U.S.C. 112, 6<sup>th</sup> paragraph to a structural expression or to an expression removing the presumption of a “means-plus-function” statement, it is not intended to narrow the claim so amended for purposes of patentability, but rather to place the claim in a form considered to be intended by the applicant from a foreign country where claim limitations described in terms of means-plus-function do not have the same effect as under U.S. practice. Thus, such amendments are intended to establish a full range of equivalents to the claim elements so amended under the U.S. doctrine of equivalents and beyond the range associated with “means-plus-function” expressions according to 35 U.S.C. 112, 6<sup>th</sup> paragraph, just as if the claim so amended was presented originally in its amended form.

All rights are reserved to the original disclosed and claimed subject matter and any cancellation of claims is made without prejudice or disclaimer.

**LIST OF CURRENT CLAIMS**

1. (Currently Amended) A value document, comprising ~~in particular bank note,~~  
~~having~~ a value document substrate and different feature substances for checking the  
value document, including ~~characterized in that~~ a first feature substance ~~[[is]]~~  
incorporated into the volume of the substrate of the value document, and second and  
third feature substances provided on ~~are applied~~ to the value document substrate in  
a printing ink jointly and in the form of a coding, the second feature substance  
comprising ~~being formed by~~ a luminescent substance, and the third feature  
substance comprising ~~[[by]]~~ a material absorbent in a special spectral range.

2. (Currently Amended) The value document according to claim 1, wherein  
~~characterized in that~~ the first feature substance is distributed substantially uniformly  
within the volume of the value document substrate.

3. (Currently Amended) The value document according to claim 1, wherein ~~or 2,~~  
~~characterized in that~~ the third feature substance absorbs in the infrared spectral  
range.

4. (Currently Amended) The value document according to claim 3, wherein  
~~characterized in that~~ the third feature substance is substantially colorless or has only  
weak inherent color in the visible spectral range.

5. (Currently Amended) The value document according to claim 3, wherein ~~or 4,~~  
~~characterized in that~~ the third feature substance absorbs significantly in a the  
spectral range selected from the group consisting of the range above about 1.2  $\mu\text{m}$ ,  
and the preferably in the spectral range from about 1.5  $\mu\text{m}$  to 2.2  $\mu\text{m}$ .

6. (Currently Amended) The value document according to claim 3, wherein ~~at~~  
~~least one of claims 3 to 5, characterized in that~~ the third feature substance has no  
significant absorption at a wavelength of about 0.8  $\mu\text{m}$ .

7. (Currently Amended) The value document according to claim 3, wherein at least one of claims 3 to 6, characterized in that the third feature substance comprises one of a doped semiconductor material or a metal oxide.

8. (Currently Amended) The value document according to claim 3, wherein at least one of claims 3 to 7, characterized in that the third feature substance is present in the printing ink in particle form with an average particle size smaller than 50 nm.

9. (Currently Amended) The value document according to claim 3, wherein at least one of claims 3 to 7, characterized in that the first feature substance is formed by a luminescent substance emitting in the absorption range of the third feature substance.

10. (Currently Amended) The value document according to claim 1, wherein at least one of claims 1 to 9, characterized in that a fourth feature substance is applied to the value document substrate, ~~preferably printed thereon~~, which is preferably different from the first to third feature substances.

11. (Currently Amended) The value document according to claim 1, wherein at least one of claims 1 to 10, characterized in that the first and/or fourth feature substance is formed by a luminescent sub-stance or a mixture of luminescent substances.

12. (Currently Amended) The value document according to claim 1, wherein at least one of claims 1 to 11, characterized in that at least one of the feature substances is formed on the basis of a host lattice doped with rare earth elements.

13. (Currently Amended) The value document according to claim 1, wherein at least one of claims 1 to 12, characterized in that the coding extends over a predominant part of a surface of the value document, ~~in particular over the~~

~~substantially total surface of the value document.~~

14. (Currently Amended) The value document according to claim 1, wherein at ~~least one of claims 1 to 13, characterized in that~~ the coding is a bar code.

15. (Currently Amended) The value document according to claim 1, wherein at ~~least one of claims 1 to 14, characterized in that~~ the coding is information about the value document, ~~the information preferably being present in encrypted form.~~

16. (Currently Amended) The value document according to claim 1, wherein at ~~least one of claims 1 to 15, characterized in that~~ the value document substrate comprises a printed or unprinted cotton paper.

17. (Currently Amended) The value document according to claim 1, wherein at ~~least one of claims 1 to 16, characterized in that~~ the value document substrate comprises a printed or unprinted plastic film.

18. (Currently Amended) The value document according to claim 10, wherein and ~~at least one of claims 1 to 17, characterized in that~~ the fourth feature substance is a printing ~~printed~~ on the value document substrate together with a printing ink, ~~in particular a visible printing ink, in the form of a printed image.~~

19. (Currently Amended) The value document according to claim 18, wherein ~~characterized in that the printed image is a coding, in particular a bar code or an alphanumeric character string.~~

20. (Currently Amended) The value document according to claim 1, wherein at ~~least one of claims 1 to 19, characterized in that~~ the value document has a further printed layer which partly or completely covers the value document areas provided with the second and third feature substances.

21. (Currently Amended) The value document according to claim 20, wherein ~~characterized in that~~ the further printed layer is opaque in the visible spectral range and is transparent or translucent in at least one of the emission range of the second feature substance and ~~and/or~~ in the absorption range of the third feature substance.

22. (Currently Amended) The value document according to claim 20, wherein ~~48 or 49 and according to claim 20 or 21, characterized in that~~ the further printed layer is formed by the printing ink containing a ~~the~~ fourth feature substance, said fourth feature substance comprising a printing in the form of a printed image.

23. (Currently Amended) A method for producing a value document according to claim 1, wherein ~~any of claims 1 to 22, characterized in that~~ the first feature substance is incorporated into the volume of the value document substrate, and the second and third feature substances are applied to the value document substrate in a printing ink jointly and in the form of a coding.

24. (Currently Amended) The production method according to claim 23, wherein ~~characterized in that~~ a fourth feature substance is applied to the value document substrate, ~~in particular printed thereon.~~

25. (Original) The production method according to claim 24, characterized in that the printing ink containing the second and third feature substances, and the fourth feature substance are applied to the value document substrate as a mixture or as separate substances.

26. (Currently Amended) The production method according to claim 24, wherein ~~or 25, characterized in that~~ the fourth feature substance is printed on the value document substrate together with a printing ink, ~~in particular a visible printing ink,~~ in the form of a printed image.

27. (Currently Amended) A method for checking or processing a value document



according to claim 2, comprising the steps: checking any of claims 2 to 22, wherein the authenticity of the value document ~~is checked~~ and carrying out a value recognition of the document ~~carried out~~ by using at least one characteristic property of at least one of the first and and/or second feature substance for checking the authenticity of the value document, and the coding formed by at least one of the second and and/or third feature substance for the value recognition of the value document.

28. (Currently Amended) The method according to claim 27, wherein ~~characterized in that~~ at least one characteristic property of the first feature substance is used for checking the authenticity of the value document, and the coding formed by the third feature substance for the value recognition of the value document, by a user of a first user group.

29. (Currently Amended) The method according to claim 27, wherein ~~or 28,~~ ~~characterized in~~ at least one characteristic property of the second feature substance is used for checking the authenticity of the value document, and the coding formed by the second feature substance for the value recognition of the value document, by a user of a second user group.

30. (Currently Amended) The method according to claim 27, wherein ~~characterized in that~~ at least one characteristic property of at least one of the first and and/or fourth feature substance is used for checking the authenticity of the value document, and the coding formed by the third feature sub-stance is used for the value recognition of the value document, if the user belongs to the first user group, and at least one characteristic property of the second feature substance is used for checking the authenticity of the value document, and the coding formed by the second feature substance is used for the value recognition of the value document, if the user belongs to the second user group.

31. (Currently Amended) The method according to claim 27, wherein at least one

~~of claims 27 to 30, characterized in that~~, for value recognition by a user of the first user group, the coding is irradiated with radiation from the absorption range of the third feature substance, the absorption of the coding is determined at a wavelength from the irradiation range, and the value recognition is carried out on the basis of the determined absorption.

32. (Currently Amended) The method according to claim 31, wherein ~~characterized in that~~ the irradiation of the coding is effected in the infrared spectral range.

33. (Currently Amended) The method according to claim 31, wherein ~~or 32, characterized in that~~ the determination of the absorption is performed in spatially resolved fashion.

34. (Currently Amended) The method according to claim 27, wherein ~~at least one of claims 27 to 33, characterized in that~~, for value recognition by a user of the first user group, at least a partial area of the value document is irradiated with radiation from the excitation range of the luminescent first feature substance, the emission of the first feature substance is determined at a wavelength from the absorption range of the third feature sub-stance, and the value recognition is carried out on the basis of the determined emission.

35. (Currently Amended) The method according to claim 34, wherein ~~characterized in that~~ the irradiation of the coding is effected in the infrared spectral range.

36. (Currently Amended) The method according to claim 34, wherein ~~or 35, characterized in that~~ the determination of the emission is performed in spatially resolved fashion.

37. (Currently Amended) The method according to claim 34, wherein ~~at least one of claims 34 to 36, characterized in that~~ the emission of the first feature substance is determined on opposite sides of the value document, ~~the value recognition being~~

~~preferably performed on the basis of a comparison of the emission determined on opposite sides.~~

38. (Currently Amended) The method according to claim 27, wherein ~~at least one of claims 27 to 37, characterized in that~~, for the authenticity check and value recognition by a user of the second user group, the coding is irradiated with radiation from the excitation range of the second feature substance, the emission of the coding is determined at at least one wavelength from the emission range of the second feature substance, and at least one of the check of authenticity and ~~and/or~~ the value determination is carried out on the basis of the determined emission.

39. (Currently Amended) The method according to claim 38, wherein ~~characterized in that~~ the second feature substance is irradiated with at least one of visible and ~~and/or~~ infrared radiation, and the emission of the second feature substance is determined in the infrared spectral range.

40. (Currently Amended) The method according to claim 27, wherein ~~at least one of claims 27 to 39, characterized in that~~ the irradiation is performed with a light-emitting diode or laser diode.

41. (New) The value document according to claim 13, wherein the coding extends over substantially the total surface of the value document.

42. (New) The value document according to claim 15, wherein the information is in encrypted form.

43. (New) The value document according to claim 19, wherein the coding is one of a bar code and an alphanumeric character string.

44. (New) The production method according to claim 24, wherein the fourth feature is applied by printing on the value document.



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45. (New) The value document according to claim 37, wherein the value recognition is performed on the basis of a comparison of the emission determined on opposite sides.